

TRAINING THE HYBRID SINGER: MIXED VOICE FOR THE *BEL CANTO*  
AND MUSICAL THEATRE SINGER

Matthew Vala, B.M., M.P.A., M.M.

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APPROVED:

Richard Croft, Major Professor  
Stephen Austin, Committee Member  
Elvia Puccinelli, Committee Member  
Jeffrey Snider, Committee Member  
Molly Fillmore, Chair of the Division of Vocal  
Studies  
Jaymee Haefner, Director of Graduate Studies  
in the College of Music  
John Richmond, Dean of the College of Music  
Victor Prybutok, Dean of the Toulouse  
Graduate School

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Voice teachers can train versatile singers by infusing musical theatre technique within *bel canto* evidence-based pedagogy. Seeing these two genres as possessing similarities instead of as unrelated fields allows teachers to not only match academic knowledge with the current entertainment job market, but most importantly, possess a versatile technique allowing them to train singers to perform fluently in multiple styles: the hybrid singer. An area of confusion in both *bel canto* and musical theatre training is mixed registration. This dissertation uses historic pedagogical texts and contemporary writings on mixed registration to understand laryngeal and acoustical events of the treble voice. The relationship between the two modes of voice production and musical theatre timbral acoustics (“legit” head voice, traditional belt, contemporary chest-mix, contemporary head-mix) is discussed with applicable tools for voice teachers training versatile singers.

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By

Matthew Vala

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*Authenticity is a collection of choices that we have to make every day. It's about the choice to show up and be real. The choice to be honest. The choice to let our true selves be seen.*

Brené Brown

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## PREFACE

The confining boundaries between classical singing and musical theatre are ever present in educational training programs. Too often, when faced with differences, it is easier to stand on one side and critique the other. Opinions based on inadequate knowledge, limiting oneself in a confined area of study, and reluctance to embrace discomfort extinguishes the possibilities of growth. My experience as a voice performance scholar interested in training musical theatre is wrought with a cacophony of responses from students, colleagues, and teachers:

- Oh! You mean, like, Idina Menzel singing “Let it Go!”
- Musical theatre singing is just yelling! I could never do that to my classical training!
- The only repertoire I know to give my voice students is *The Sound of Music* or Disney songs.
- That’s cute. I sing real music.

The same kind of responses are heard when musical theatre students speak of classical singers:

- Yes, you have a great voice, but can you act?
- Classical singers just don’t sound right in musical theatre.
- All I learned in voice lessons was *Caro mio ben* and *Sure on This Shining Night*. My lessons didn’t help me with my show songs.

This project was created to hold firm the importance of science-based pedagogy in singing and to bridge the divide in nonclassical singing, working to meet the needs of students requiring versatile training. Fine arts schools are filled with brilliant minds, instructors, and artists that specialize in their particular field of study, but what happens when a singer’s talents do not fit precisely within a degree? How do students train successfully when required to train in three different departments (music, dance, theatre), but too often must grapple with merging three disparate skills into their art form? How do we build a voice studio that supports



the growth of a singer, regardless of genre, and provide a versatile and comprehensive training that meets the future needs of the student? This dissertation examines these questions by standing at the center of the compass and proposes a hybrid form that bridges traditional vocal education with contemporary musical theatre training.

## CHAPTER 1

### THE NEED FOR HYBRID TRAINING

Throughout higher education institutions, voice professors are teaching students in various degree fields, such as vocal performance, musical theatre, music education, vocal jazz, and general studies. Often students are studying nonclassical music pertinent to their specialization with instructors who have limited training or performance experience outside of classical singing.<sup>1</sup> While most universities, colleges, and conservatories provide *bel canto* training<sup>2</sup>, the current entertainment job market trends show the inclusion of musical theatre works in opera house seasons, the composition of new works blurring the separation between *bel canto* and musical theatre singing, and modern vocal pieces incorporating a wide range of new vocal demands on the contemporary singer. Voice teachers need accessible and effective instructional tools to compliment *bel canto* training as nontraditional vocal repertoire widens its demands. Training in both *bel canto* and musical theatre provides the opportunity to establish the hybrid singer: one who possesses a versatile technique that allows them to perform fluently in multiple styles.

While the early years of musical theatre had large similarities to eighteenth and nineteenth century operetta, musical theatre singing uses a more natural speaking quality during singing. This style was said to heighten the emotional impact of the listener by marrying

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<sup>1</sup> Julie E. Balog, "A Guide to Evaluating Music Theater Singing for the Classical Teacher," *Journal of Singing* 61, no. 4 (2005), 401.

<sup>2</sup> *Grove Music Online* defines *bel canto*, meaning beautiful singing, as the Italian vocal style promoting legato line and vocal agility throughout the vocal range. The term is commonly used for the classical training of singers.

both words and music.<sup>3</sup> Karen Hall, author of *So You Want to Sing Music Theater*, details the nineteenth century emergence of musical theatre compositions that require treble vocalists to sing in the middle and lower part of their voice over full orchestra and yet be audible without any electronic amplification. This traditional style of belting provided excitement in the performance with intelligibility of the words. But we can also look at *bel canto* pedagogical texts before the creation of musical theatre sharing similar thoughts to an audience member's emotional reaction and textual comprehension. Pier Francesco Tosi, author of *Opinioni de' cantori antichi e moderni*, wrote his instructional treatise in 1723 with comments on the importance of text. He writes,

Words be uttered in such a Manner, without any Affectation, that they be distinctly understood, and no one Syllable be lost; for if they are not distinguished, the Singer deprives the Hearer of the greatest Part of that Delight which vocal Musick [sic] conveys by Means of the Words. For, if the Words are not heard so as to be understood, there will be no great Difference between a human Voice and a Hautboy. This Defect, tho' one of the greatest, is now-a-days more than common, to the greatest Disgrace of the Professors and the Profession.<sup>4</sup>

Francesco Lamperti, author of *L'arte del canto*, also says,

I would observe that singing, being but an extension of speaking, the notes which we use in speaking are naturally animated, as they express rage, irony, love, pity, etc., and the words with which these feelings are expressed are emitted clearly.<sup>5</sup>

The writings from both historic and contemporary pedagogues show that the art of singing asks the same of the performer, regardless of genre, but sometimes requires an alternative style of

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<sup>3</sup> Karen Hall, *So You Want to Sing Music Theater: A Guide for Professionals* (Lanham, MD: Rowan & Littlefield, 2014), 63.

<sup>4</sup> Pier Francesco Tosi, *Opinioni de' cantori antichi e moderni* (Bologna: Lelio dalla Volpe, 1723). Translated by Mr. Galliard as *Observations on the Florid Song* (London: J. Wilcox, 1743), 58–59.

<sup>5</sup> Francesco Lamperti, *L'arte del canto* (Milan: Ricordi, 1883). Translated by J.C. Griffiths as *The Art of Singing* (New York, N.Y.: G. Schirmer, 1890), 8.

presentation. Singers are implored to navigate through various styles of singing, most often receiving a narrow form of training. It is important that voice teachers monitor the changing world of music to equip students with versatile vocal technique and provide repertoire spanning across numerous genres.

Modern production companies are programming opera productions and musical theatre works in the same performance seasons. Large opera houses, from Atlanta Opera, Dallas Opera, Houston Grand Opera, LA Opera, and Lyric Opera of Chicago are embracing this cross-pollination of two theatrical art forms and providing artistic opportunities for hybrid singers. From 2014–2017, opera companies regularly presented the works of Leonard Bernstein, George Gershwin, Lerner and Loewe, Cole Porter, Rodgers and Hammerstein, Stephen Sondheim, Andrew Lloyd Webber, and Kurt Weill. Other contemporary composers also regularly included are Ahrens and Flaherty, Alan Menken, and Schönberg and Boublil.<sup>6</sup> This list identifies composers writing in a broad range of musical theatre subgenres (Tin Pan Alley, Golden Age, contemporary book musicals, crossover, and pop/rock) now appropriate for presentation on opera house stages.

European opera houses also require versatile performers to participate in both operas and musicals. This asks the singer to negotiate their vocal techniques depending upon the genre of theatrical production within season contracts.<sup>7</sup> Recent castings of singers show the two worlds of theatrical entertainment bridging the stylistic gap with performers who are

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<sup>6</sup> Mark McQuade, Jennifer McQuade, Allen Henderson, and David Sisco, "Cinderella Meets Cendrillon: Music Theater and Opera Living Under the Same Roof." *Journal of Singing* 75, no. 2 (2018), 122–123.

<sup>7</sup> *Ibid.*, 125.

capable of participating in both opera and musical theatre. Kelli O'Hara, a graduate from Oklahoma City University, originated the role of Clara in Adam Guettel's *The Light in the Piazza*, portrayed Nellie Forbush in the Broadway revival of Richard Rodgers and Oscar Hammerstein's *South Pacific*, and performed in the Metropolitan Opera's *The Merry Widow* along with singing Despina in Mozart's *Così fan tutte*. Kristin Chenoweth, who holds a master's degree in opera, began her career singing "legitimate"<sup>8</sup> roles such as Luisa in Harvey Schmidt and Tom Jones' *The Fantasticks* and Christine in Maury Yeston's *Phantom*. Most popularly known for originating Glinda in Stephen Schwartz's *Wicked* and her performance in Leonard Bernstein's *Candide*, Chenoweth merges her cross-training into these roles with the use of stylistic choices in "legit," belting, and mixing with an overall arch of musical depth throughout the production.<sup>9</sup> Nathan Gunn is an American baritone known for his operatic roles of Papageno in Mozart's *Die Zauberflöte*, the title role in Benjamin Britten's *Billy Budd*, and the title role in *Don Giovanni*, but he is also known for New York Philharmonic's performances of Rodgers and Hammerstein's *Carousel* and Lerner and Loewe's *Camelot*, Lyric Opera of Chicago's production of Jerome Kern's *Showboat*, and Houston Grand Opera's production of Stephen Sondheim's *Sweeney Todd*.<sup>10</sup> These examples of versatility have the ability to change the landscape in how voice teachers train their students and how the music world views the divide between opera and musical theatre.

Musical theatre history spans over 150 years with lineage to operettas, vaudeville, and

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<sup>8</sup> *Legitimate* is a term defined by musical theatre to have close relation to the style of *bel canto* singing.

<sup>9</sup> Linda Lister, "The Broadway Soprano," *The American Music Teacher* 62 no. 5 (2013).

<sup>10</sup> Nathan Gunn, "Nathan's official biography," 2016, accessed January 31, 2021, [nathangunn.com](http://nathangunn.com).

minstrel shows. Traditional musical theatre, contemporary concept/book musicals, and pop/rock musicals are a small list of the inclusiveness of the musical theatre genre. The study of this art form is moving beyond the broad distinctions between head voice and chest voice and must look towards American music and the impact it has on teaching future hybrid singers.<sup>11</sup>

Broadway audition notices categorize four types of musicals and their music types: “Legit” (originating from the style of opera/operetta), traditional (songs from the Golden Age of Broadway<sup>12</sup>), contemporary (songs written specifically for theatre performance), and pop/rock (songs with a nontheatrical basis heavily influenced by popular music used in productions).<sup>13</sup> Within these specific subgenres of musical theatre, the inclusion of distinct styles vary within the same show or are used as a vehicle steering the authenticity of the story. For example, Jeanine Tesori and Dick Scanlan’s *The Girl in 14G*, is a contemporary musical theatre song influenced by jazz music and opera, but the entirety of the musical theatre song is connected through a musical theatre singing style.<sup>14</sup> This can be similar in a larger format of musical theatre productions. Boundaries are continually being blurred not only in composition, but also within the requirements of the vocalist.

Current trends show growth in musical theatre programs both nationally and

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<sup>11</sup> Robert Edwin, Matthew Edwards, and Matthew Hoch, "CCM Versus Music Theater: A Comparison," *Journal of Singing* 75 no. 2 (2018), 185.

<sup>12</sup> *Histories of the Musical: An Oxford Handbook of the American Musical, Volume 1* states the Golden Age of Broadway begun around 1927 and ended between the mid-1950s and late 1970s.

<sup>13</sup> Warren Freeman, Kathryn Green, and Philip Sargent, "Deciphering Vocal Demands for Today's Broadway Leading Ladies," *Journal of Singing* 71 no. 4 (2015), 491-495.

<sup>14</sup> Richard Walters, Jerry Bock, Cy Coleman, Leonard Bernstein, David Yazbek, Jule Styne, Lisa Lambert, et al, *The Singer's Musical Theatre Anthology*. volume 5 (Milwaukee, WI: Hal Leonard), 2008.

internationally. With this in mind, voice teachers should equip themselves with the necessary tools to provide the highest level of education to an increasing wave of students who are entering the entertainment industry and requiring more versatility than ever before. Warren Freeman, Kathryn Green, and Philip Sargent, authors of the *Journal of Singing* article "Deciphering Vocal Demands for Today's Broadway Leading Ladies," collected six months of audition notices and revealed four areas most musical theatre singing styles reside within the genres: "legit"/classical, traditional, contemporary, and pop/rock.<sup>15</sup> From these classifications, three key voice qualities have emerged within the musical theatre genre. Teachers of this style use the terminology of "legit", mix, and belt.<sup>16</sup> Wendy LeBorgne and Marci Rosenberg, authors of *The Vocal Athlete*, also state, "It has also been reported that approximately 34% of university-level teachers who train nonclassical singers have neither performance nor pedagogy training in commercial music."<sup>17</sup> "Follow-Up Contemporary Commercial Music (CCM) Survey: Who's Teaching What in Non Classical Music" is another study, found in the *Journal of Voice*, conducted by Edrie Means Weekly and Jeanette L. LoVerti. In this study, Weekly and LoVerti found only 19% of musical theatre voice teachers felt they had the appropriate training for this style.<sup>18</sup> These studies show the rapid change occurring in the entertainment industry while higher education slowly moves towards inclusivity of a wider training of genres.

Musical theatre song continues to expand its definitive boundaries through the rapid

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<sup>15</sup> Freeman, Green, and Sargent, "Deciphering Vocal Demands for Today's Broadway Leading Ladies," 491.

<sup>16</sup> Wendy D. LeBorgne and Marci Daniels Rosenberg, *The Vocal Athlete* (San Diego, CA: Plural Publishing, 2014), 218.

<sup>17</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 408.

<sup>18</sup> E. Means Weekly and J. LoVerti, "Follow-up Contemporary Commercial Music: Who's Teaching What in Nonclassical Music?," *Journal of Voice* 23, no. 3, May 2009, 367–375.

output of compositions, the emergence of new composers, and the inclusivity of musical styles. Since the beginning of the twenty-first century, musical theatre singing has been classified in the field of Contemporary Commercial Music (CCM). Matthew Edwards and Matthew Hoch, authors of the article “CCM versus Music Theater: A Comparison,” state, “As time moves forward, it is becoming increasingly clear that the nonclassical nature of music theater is perhaps one of the only things that the genre has in common with other CCM genres.”<sup>19</sup> With this understanding of musical theatre singing residing in its own categorization, university and conservatory teachers rely on approachable teaching tools from their traditional vocal study of *bel canto* singing to support the “legit” sound, dismissing training belt for fear of vocal injury, and leaving an absence in training of mixed registration capable for use in both musical theatre and *bel canto* singing.

Higher education vocal study is heavily focused in training the *bel canto* style to all voice students. Universities, colleges, and conservatories generally assign musical theatre students to adjunct faculty, teaching fellows, or instructors with limited knowledge of training musical theatre. Instructors provide students with classical exercises and repertoire strictly residing in the “legit”/classical category. If students receive repertoire outside of the “legit”/classical category, the student is most often proceeding blindly as to how to produce stylistically appropriate sounds. From the studies provided above, this leaves the student with a *bel canto* technique without vocal accessibility to other categories of musical theatre subgenres. This dissertation is not asking voice teachers to choose training in only one genre, but proposing

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<sup>19</sup> Edwin, Edwards, and Hoch, “CCM Versus Music Theater: A Comparison,” 183.



teachers create pedagogical inclusivity of both genres and provide broad repertoire selections similar to the standard practice in classical voice music. Cross-training pedagogy should contain a healthy extension of range in both head and chest register, vocal exercises to meet market demands, exploration of timbral differences throughout the voice, and a healthy understanding of registration differences between styles.<sup>20</sup> Without training in multiple styles, voice teachers leave students without the essential technique required in nontraditional literature that could lead to vocal harm. Training in both *bel canto* and musical theatre provides the opportunity for the hybrid singer to be solidly grounded in traditional pedagogy and equip singers with contemporary technique allowing them to move in between musical genres.

Voice teachers can train versatile singers by infusing musical theatre technique within *bel canto* evidence-based pedagogy. Seeing these two genres as possessing similarities instead of as unrelated fields allows teachers to not only match academic knowledge with the current entertainment job market, but most importantly, possess a versatile technique allowing them to perform fluently in multiple styles: the hybrid singer. An area of confusion in both *bel canto* and musical theatre training is mixed registration. This dissertation uses historic pedagogical texts and contemporary writings on mixed registration to understand laryngeal and acoustical events of the treble voice. The relationship between the two modes of voice production and musical theatre timbral acoustics (“legit” head voice, traditional belt, contemporary chest-mix, contemporary head-mix) is discussed with applicable tools for voice teachers training versatile singers.

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<sup>20</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 198.

## CHAPTER 2

### THE VOCAL MIX: EVIDENCE IN *BEL CANTO* PEDAGOGY

To understand the current state of voice training, one must acknowledge the history of *bel canto* voice teaching. Historic pedagogical texts show glimpses of information on mixed registration across multiple authors. Terms such as *mixed voice*, *medium register*, or *voix mixte* are examples found within these texts. Mixed registration is still being explored today by many contemporary vocal pedagogues with reference to these earlier findings. Using the following *bel canto* pedagogues and their writings on mixed registration will provide a foundation to understand how the voice functions in the middle range and how to apply this concept of singing in the teaching of versatile singers.

The following pedagogues were chosen because of their specific writings pertaining to mixed registration and descriptions on the middle voice:

- Pier Francesco Tosi (1647–1732) was the author of *Opinioni de' cantori antichi e moderni*. His writings became one of the first published vocal pedagogy texts and remains integral in the teachings of *bel canto* singing. Tosi describes the “feigned” voice as a short bridge between the chest voice and head voice. This area described by Tosi could be considered a third register and one of the first publications to discuss the concept of mixed voice.<sup>21</sup>

- Francesco Lamperti (1813–1892) and Giovanni Battista Lamperti (1839–1910) explain in their writings that the treble voice is structured into three registers. Both Lampertis

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<sup>21</sup> Tosi, *Opinioni de' cantori antichi e moderni*. Translated by Mr. Galliard as *Observations on the Florid Song*, 22-23.

analyze these registrations through the balancing act of laryngeal and acoustical events.<sup>22</sup>

- Mathilde Marchesi (1821–1913), voice teacher and author of *Bel Canto: A Theoretical & Practical Vocal Method*, discusses in her text the use of three registers in the treble voice: chest, medium, and head. While Marchesi taught similarly to her past teacher, Manuel Garcia II (1805–1906), she had differing opinions on treble voice registration and her notions are integral in this research to include as she provides a female perspective on the treble voice.<sup>23</sup> These historical sources lay a foundation of theoretical teachings on mixed registration and their application in *bel canto* singing.

Each of the above mentioned pedagogues are included below with a comprehensive look at how their original ideas of middle voice and mixed registration have continued to be studied in current vocal pedagogy:

#### Pier Francesco Tosi's "Feigned" Voice and Richard Miller on Mixture

Pier Francesco Tosi, writer and *castrato* soprano, is the author of *Opinioni de' cantori antichi e moderni* (1743). His published writings are considered one of the first pedagogical textbooks discussing tone, registers, and the "feigned" voice.<sup>24</sup> Tosi uses the concept of "feigned" voice as a way to unite the natural voice of the *di Petto* (chest voice) and *di Testa* (head voice). Without this transitional area, the voice stays divided in the two registers. In discovering the "feigned" voice, he suggests the student use the vowels /i/ or /e/ to

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<sup>22</sup> Joseph Talia, *A History of Vocal Pedagogy: Intuition & Science* (Samford Valley, Australia: Australian Academic Press Group Pty. Ltd.), 270.

<sup>23</sup> Mathilde Marchesi, *Bel Canto: A Theoretical & Practical Vocal Method* (New York: Dover, 1970), xiv.

<sup>24</sup> Talia, *A History of Vocal Pedagogy: Intuition & Science*, 38.

successfully navigate the transitional area.<sup>25</sup> Joseph Talia, in *A History of Vocal Pedagogy: Intuition and Science*, discusses Tosi's use of the term "feigned" voice. He described "feigned" voice as a way for the chest voice to make modifications, allowing it to connect into the head voice. He believed this is what we would consider a modern-day definition of mixed registration.<sup>26</sup> While no mentions of muscular adjustments are found throughout Tosi or Talia's texts, this leads one to believe the /i/ and /e/ pharyngeal space along with a stabilized larynx were instructed to connect the chest and head registers in what could be considered the mixing of two registrations.

More recent vocal pedagogues, such as Richard Miller (1926–2009), have expanded on the concept of mixed registration. Miller states,

Mixture describes that kind of tone which is neither patently head nor chest; it is possible for either chest or head timbre to predominate in this mixture. Head mixture indicates some considerable introduction of the lighter sound into either the chest or the middle voice; chest mixture describes the carrying up of some of the chest timbre into the lower middle voice.<sup>27</sup>

If the chest voice is carried up out of its normal range limit with a heavy muscular weight, the middle voice will not be able to respond due to the heavier strain placed on the *vocalis* muscle.<sup>28</sup> Miller discusses the difference between 1) open chest and 2) chest sounds including head quality. The open chest is strictly an unmodified sound providing directness to the voice that differentiates it from the middle voice. A chest voice with head quality would require

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<sup>25</sup> Tosi, *Opinioni de 'cantori antichi e moderni*. Translated by Mr. Galliard as *Observations on the Florid Song*, 23–24.

<sup>26</sup> Talia, *A History of Vocal Pedagogy: Intuition & Science*, 43–44.

<sup>27</sup> Richard Miller, *English, French, German and Italian Techniques of Singing: A Study in National Tonal Preferences and How They Relate to Functional Efficiency* (Metuchen, New Jersey: The Scarecrow Press, Inc., 1977), 131.

<sup>28</sup> *Ibid.*, 133–134.

modification of the pharyngeal space along with a less declamatory nature of sound production.<sup>29</sup> Barbara Doscher (1922–1996), author of *The Functional Unity of the Singing Voice*, states, “The task of voice teachers is not to isolate the registers, but to mask them imperceptible.”<sup>30</sup> The position of the larynx, breath, and acoustic space can create endless possibilities to vocal timbre. While current definitions in voice science label registers by isolated laryngeal function, acoustical changes work in tandem with the larynx.<sup>31</sup> Using these concepts of mixed registration and Tosi’s teachings on the “feigned” voice, singers can navigate through the middle area of the voice with a healthy laryngeal posture and an exploration of varying acoustical space. These technical applications will be apparent in the following research musical theatre timbral acoustics.

#### Francesco Lamperti, Giovanni Battista Lamperti, and Ingo Titze on Registration

Francesco Lamperti was an Italian singing teacher at the Milan Conservatory and published *L’arte del canto* (1883–4). His teachings were based on the *Rossinian* singing style. This style focused on the agility of the singing mechanism and flowing *legato* line.<sup>32</sup> Giovanni Battista Lamperti, Francesco’s son and author of *Die Technik des Bel Canto* (1905), accompanied his father’s pupils at the conservatory and carried on his father’s teaching method through his own students. In Francesco’s writings, he instructs there are three registers to the treble voice:

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<sup>29</sup> Miller, *English, French, German and Italian Techniques of Singing*, 131.

<sup>30</sup> Barbara M. Doscher, *The Functional Unity of the Singing Voice*, 2nd ed. (Lanham, MD: The Scarecrow Press, Inc., 1994), 191.

<sup>31</sup> Doscher, *The Functional Unity of the Singing Voice*, 192–193.

<sup>32</sup> Talia, *A History of Vocal Pedagogy: Intuition & Science*, 255–258.

the chest, medium, and head register.<sup>33</sup> He emphasizes the importance of any singing instruction is to begin in the middle of the singer's voice. Creating stability in the middle voice allows the singer to expand the range of the voice to the polar ends. Giovanni Battista Lamperti suggests that as singers ascend in their chest voice, they should maintain the volume and effect of the voice while adjusting the timbre.<sup>34</sup> This creates a balanced adjustment and unified sound. Giovanni Battista Lamperti blames many issues of register faults to poor breathing.<sup>35</sup> If the singer's airflow is consistent and supported, the larynx will vibrate evenly producing a consistent tone. Having a consistent laryngeal function will allow the singer to make modifications to the timbre through pharyngeal adjustments as the voice travels through its range. The stability of the vocal mechanism and attention to spatial awareness are integral in negotiating the ascension into Lamperti's middle register.

Understanding the differences in laryngeal function is a necessity if we are to understand registration. Ingo R. Titze (1941–), Distinguished Professor of Speech Science and Voice at the University of Iowa and Executive Director of the National Center for Voice and Speech at the University of Utah, details the two mechanisms of vocal registration as Mode 1 (M1) and Mode 2 (M2). M1 has various synonymous names such as chest voice, full voice, or thick folds. M2 also has similar terms related to it, such as head voice, *falsetto*, or light voice. Titze explains mixed registration as a mixture of Mode 1 and Mode 2. In one theory, he says the modes are a mechanical function of the larynx, while mixing can be considered an

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<sup>33</sup> Lamperti, *L'arte del canto*. Translated by J.C. Griffiths as *The Art of Singing*, 5.

<sup>34</sup> Giovanni Battista Lamperti, *Die Technik des Bel Canto*. Translated by Theodore Baker as *The Technics of Bel Canto* (New York, NY: G. Schirmer, 1905), 22–23.

<sup>35</sup> Lamperti, *Die Technik des Bel Canto*. Translated by Theodore Baker as *The Technics of Bel Canto*, 22–23.

acoustical and perceptual event. He states, “The sudden register shift is simply camouflaged by vowel modification or compensatory adjustments in adduction or lung pressure.”<sup>36</sup> *Music Theatre Voice: Production, Physiology and Pedagogy* also confirms the understanding of this acoustical event. It states, “It seems that singers in this quality either sing in mechanism M1 or M2 for a given pitch, while also adjusting their vocal tract and laryngeal open quotient so that the overall sound quality imitates that of the alternate mechanism.”<sup>37</sup> Titze’s other theory is M1 and M2 merge to become one phenomenon. “Tensions in the tissue layers of the vocal fold (ligament and TA [thyroarytenoid] muscle), as well as the medial surface shape, can be balanced so that a smooth transition occurs in the vibratory pattern.”<sup>38</sup> The larynx and the resonator work in tandem and cannot be separated in the function of vocal production. The difficulty in defining a vocal mix sound comes from the intricacy of harmonic-resonance interaction that can be heard as vocal registration. Titze says, “Thus, with multiple harmonics interacting with multiple resonances on multiple pitches, a simple explanation of mixed registration is not likely to be forthcoming soon.”<sup>39</sup> While these voice science theories help to uncover pieces of the mystery behind mixed registration, voice teachers must look at how to take this information and implement technical applications that are beneficial to the student. Acoustical modification along with a lightening of weight in the laryngeal function, whether in *bel canto* or musical theatre singing, will provide applicable tools in the voice studio.

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<sup>36</sup> Ingo R. Titze, “Mixed Registration,” *Journal of Singing* 75, no. 1 (2018), 49–50.

<sup>37</sup> Tracy Bourne, Maeva Garnier, and Diana Kenny, “Music theater voice: production, physiology and pedagogy,” *Journal of Singing* 67, no. 4 (2011), 441.

<sup>38</sup> Titze, “Mixed Registration,” 49.

<sup>39</sup> *Ibid.*, 49.

## Mathilde Marchesi and Barbara Doscher on Register Transitions

Mathilde Marchesi became a leading instructor and scholar in teaching treble voice. While Marchesi was a student of the famous pedagogue, Manuel Garcia II, she had differing opinions on female voice registration. It is also important to feature Marchesi because her ideas are integral to this research by including a female perspective on the treble voice.<sup>40</sup> Her published method book, *Bel Canto: A Theoretical & Practical Vocal Method*, covers her stance on the structure of the voice and provides a multitude of vocal exercises.<sup>41</sup> With regards to registration, Marchesi states,

At the present day, the immediate causes of effects in these great phenomena of nature are well known, but the principles underlying these causes are yet to be discovered. The special organization, interior and exterior, of a body, which by its oscillations sets the air vibrating, or by its surface reflects light in a particular manner, decides the nature of the sound or of the shade of the colour.<sup>42</sup>

Mathilde Marchesi's instructional method states the treble voice possesses three registers. These registers are the chest, the medium, and the head. Marchesi explains her intentional use of the term medium rather than the *falsetto* because the medium register is located at the center of the voice. It also avoids confusion with the term *falsetto* used in the male upper voice. She states, "*Falsetto*, which signifies *Falso* (false), that is, in place of the true, is a term that has been used in Italy from the earliest period in the history of the art of singing, to indicate certain piano effects in the high notes of the *Tenor* voice."<sup>43</sup> Marchesi does note she believes in the inclusion of empiricism in the voice. Empiricism, defined by the Merriam-

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<sup>40</sup> Marchesi, *Bel Canto: A Theoretical & Practical Vocal Method*, xiv.

<sup>41</sup> Talia, *A History of Vocal Pedagogy: Intuition & Science*, 437–438.

<sup>42</sup> Marchesi, *Bel Canto: A Theoretical & Practical Vocal Method*, xiii.

<sup>43</sup> *Ibid.*, xiv.



Webster Dictionary, is “the practice of relying on observation and experiment especially in the natural sciences.”<sup>44</sup> While voice science is integral in understanding the singing mechanism, Marchesi uses her empirical understanding of the treble voice to successfully train singers in the medium register.

Marchesi’s three register theory is grounded in the concurrent functions of the larynx and pharynx. She believes that because of ill training, singers do not learn the balance of the registers, which result in distinct and awkward switches of registers commonly termed as *breaks*. Equalizing the blend between the chest and the medium register occur when the last two notes of the chest register use closed vowels during an ascending passage. Marchesi believes that the freedom in singing in the compass, or center, of each register will allow for the higher register to function properly. Too much physical energy devoted to the borders of a register will lead to a register imbalance creating audible shifts as the singer ascends/descends through the voice. She states that the same instructions of blending the chest and medium register should be used for other transitional areas.<sup>45</sup> Other current pedagogues have used Marchesi’s concept of medium register in current vocal teaching. Barbara M. Doscher, author of *The Functional Unity of the Singing Voice*, discusses Mathilde Marchesi’s analysis of middle registration. She states the treble singer must regulate air flow while closing the vowel of the last two ascending notes in chest voice. It is imperative the singer does not add unnecessary weight or volume to the sound as this will reveal the registration break. The medium register

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<sup>44</sup> Merriam-Webster Dictionary, s.v. “empiricism,” accessed January 29, 2021, <https://www.merriam-webster.com/dictionary/empiricism>.

<sup>45</sup> Marchesi, *Bel Canto: A Theoretical & Practical Vocal Method*, xv.

may not be considered a mode of registration in current vocal pedagogy, but the middle area of the voice possesses timbral differences than that of the defined chest and head register. The vocal color of the middle voice allows hybrid singers to make authentic and style-appropriate choices in a variety of literature. Doscher, in her writings on the middle voice, states, “It often has a somewhat veiled or breathy quality and if the back vowels are dull, they can be alternated with ringing front vowels to increase their brilliance.” Hybrid singers must learn to navigate through the middle voice with a clear understanding of *bel canto* registration while making timbral choices within the compass of the voice.

The studies of mixed registration found in the works of Tosi, the Lampertis, and Marchesi along with the more current findings of Miller, Titze, and Doscher show mixed registration as an area of study still filled with more questions than answers. From the research provided, laryngeal stability is essential in the training of elite singers. It is also evident that acoustical modification without excess force will allow a singer to access the areas in between registration events, diminishing the audible change in modes. The multitude of *bel canto* pedagogy texts provide the basis for voice training in universities, colleges, and conservatories. These texts are not only applied in private lessons, but future teachers are being taught courses with information directly from these sources. The hybrid singer will benefit from the foundation of *bel canto* training, but must also receive sound and aesthetically accurate instruction in more current and emerging vocal styles. Cross-training a student instills the importance of a healthy and sustainable technique, provides successful choices in more than one style of singing, and allows the student to begin shaping their artistic voice as a versatile

performer. It is imperative voice teachers find pedagogical tools that will compliment both *bel canto* and musical theatre training.

## CHAPTER 3

### THE VOCAL MIX: MUSICAL THEATRE TRAINING

There are two different training methods found in vocal training publications that are solely focused on musical theatre singing: 1) a speech-driven instrument omitting the science of the vocal mechanism or 2) contemporary commercial music training that broadly covers a magnitude of music genres without specificity and integrity in vocal health. Both of these methods fail to meet the needs of a singer. Take, for instance, this analogy: If you were looking to purchase a wedding cake, you would not hire a bread baker. While these two individuals specialize in baking, the skills are not entirely the same. If you are in search of musical theatre training, it is important you study with someone who understands both the function of the voice and the intended style of literature. The teacher does not have to solely train in musical theatre, nor does the teacher have to teach only the fundamentals of *bel canto* singing. Hybrid singers need an interconnecting of *bel canto* evidence-based pedagogy along with musical theatre technique.

In the preliminary research for this dissertation, three publications emerged that contained information for training in different musical genres:

- *Cross-Training in the Voice Studio: A Balancing Act* (2018), written by Norman Spivey and Mary Saunders Barton, explores the collaboration between schools of theatre and music in training musical theatre singers. Spivey and Barton discuss their personal journeys in educating vocalists, the importance of cross-training in *bel canto* and musical theatre styles, and technical suggestions for the musical theatre treble voice in traditional and contemporary singing of musical theatre. The book provides various exercises from a speech-driven perspective, as well

as musical repertoire recommendations based upon the students' training level.<sup>46</sup> This text, written in 2018, is one of the few current publications detailing cross-training between vocal styles. It is the closest to providing information about training the hybrid singer, but is heavily weighted towards speech-driven pedagogy.

- *So You Want to Sing Music Theater: A Guide for Professionals* (2014) is a book written by Karen Hall with additional materials by vocal pedagogues Scott McCoy and Wendy D. LeBorgne. Within McCoy's chapters, he discusses the pulmonary system, the structure of the larynx, resonance, and articulators. These are the basics of vocal pedagogy found in numerous undergraduate classical pedagogy textbooks. Wendy LeBorgne's chapter discusses vocal health and proactive steps in protecting the vocal mechanism. LeBorgne also covers whole body wellness, medications, and physical well-being. There is a small segment of the book dedicated to music theater vocal pedagogy with information pertaining to breathing, posture, and tone quality, but the minimal number of pages on registration do not allow for a full understanding of musical theatre voice types and the function of the mixed voice.<sup>47</sup> While this source offers a step closer to a text for musical theatre pedagogy, it leaves gaps in its training of the nonclassical genre.

- *The Vocal Athlete* (2014), written by Wendy D. LeBorgne and Marci Rosenberg, is a pedagogical textbook with two out of seventeen chapters on the theory and research of belting in Contemporary Commercial Music (CCM). It is important to remember musical theatre has

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<sup>46</sup> Norman Spivey and Mary Saunders Barton, *Cross-Training in the Voice Studio: A Balancing Act* (San Diego, CA: Plural Publishing, 2018).

<sup>47</sup> Hall, *So You Want to Sing Music Theater*, 79-83.

been historically categorized within CCM and is now considered its own entity.<sup>48</sup> LeBorgne and Rosenberg refer to vocal scientists and health publications, which is helpful for finding primary sources in voice science dealing with laryngeal events during the production of belting.<sup>49</sup>

Because of the need for new training tools with contemporary literature, *Cross-Training in the Voice Studio: A Balancing Act*, *So You Want to Sing Music Theater: A Guide for Professionals*, and *The Vocal Athlete*, are three texts that show the beginning stages of building a comprehensive musical theatre pedagogy.

### Technical Necessities in Both Styles

Musical theatre song continues to expand its definitive boundaries through the rapid output of compositions, the emergence of new composers, and the inclusivity of musical styles. Hybrid singers will experience a variety of stylistic singing styles other than belting appropriate to the style of musical theatre. The voice must be able to participate in numerous subgenres found in musical theatre and rely on the fundamentals of healthy singing, regardless of genre. Preparing a student for the entertainment industry must begin with a foundational technique and tools to maneuver from one style to the next. Unfortunately, teachers try to adapt to these stylistic needs without skills in versatile training or, more commonly, they falsely assume that a classical technique is sufficient training for hybrid singers. The concern arises that students will perform music outside of their studio-assigned literature without an understanding of healthy voice production. This can cause unhealthy habits to infiltrate into the studio-assigned

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<sup>48</sup> Edwin, Edwards, and Hoch, "CCM Versus Music Theater: A Comparison," 183–184.

<sup>49</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 240–241.

literature or cause unintended vocal damage to the singer. Karen Hall, in *So you Want to Sing Music Theater*, discusses how her appointment as a voice instructor at Boston Conservatory introduced her to a wide range of vocal students. Many of these students were studying musical theatre. While her training was strictly classical, she was hearing different sounds in the studio other than *bel canto* singing. Even though the students were producing sounds in a healthy manner, such sounds (taught to them by a teacher in high school or something they figured out on their own) reveal an absence in voice training.<sup>50</sup> With the limited research and few pedagogical texts specifically aimed at hybrid training, students have a higher risk of obtaining improper vocal habits that could lead to vocal injury.<sup>51</sup>

### Versatile Training Myths Versus Reality

Ron Browning, in his article "Crossover Concerns and Techniques for the Classical Singer," says, "Sometimes the distinction between genres is somewhat artificial, and there also can be overlap between genres."<sup>52</sup> Browning lists common myths provided by instructors in regards to styles outside of *bel canto* singing. These include:

- Singing in any genre other than classical will damage my vocal folds.
- It is virtually impossible for a classically trained vocalist to sing meaningfully in the intended style of other genres without damaging the vocal folds.
- A classically trained singer will regress in singing ability, or otherwise damage the classical techniques that have taken years to achieve (possibly in a permanent way) while learning and performing other genres.

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<sup>50</sup> Karen Hall, "Music Theater and Classical Singing: At Odds Personally and Professionally," 2007. *Journal of Singing* 63 no. 5 (2007), 569–72.

<sup>51</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 409.

<sup>52</sup> Ron Browning, "Crossover concerns and techniques for the classical singer," *Journal of Singing* 72, no. 5 (2016), 609.

- A classically trained singer can't really make a crossover to jazz (or any other genre) in a believable way.
- Therefore, I should just focus exclusively on the genre that I know I love, and feel so comfortable with.
- My best effort in this crossover endeavor will likely not result in a good enough style or end product worthy of the music and the jazz greats.
- Classically trained singers should not sing other genres—period.<sup>53</sup>

These myths reflect an attitude that states it is not possible to sing in a healthy manner outside of *bel canto* training. Many universities, colleges, and conservatories are taking a different approach and promoting a healthy multidisciplinary course of study. The University of Illinois opera program is now being labeled as Lyric Theatre with programming of crossover and musical theatre works along with instructors who teach both classical and musical theatre techniques.<sup>54</sup> The University of Southern California music program is known as Vocal Arts with two out of the eleven voice instructors teaching nonclassical music.<sup>55</sup> The University of Colorado Boulder created a new degree plan for undergraduates in musical theatre voice with equal degree credits to its classical voice degree counterpart.<sup>56</sup> Numerous other voice departments, including the University of North Texas, are approving musical theatre repertoire in jury examinations absent from any degree in musical theatre.<sup>57</sup>

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<sup>53</sup> Browning, "Crossover concerns and techniques for the classical singer," 612.

<sup>54</sup> University of Illinois, "Lyric Theatre," <https://music.illinois.edu/area/lyric-theatre-illinois>. (Accessed January 11, 2021).

<sup>55</sup> USC Thornton School of Music, "Vocal Arts & Opera," <https://music.usc.edu/departments/vocal/>. (Accessed January 11, 2021).

<sup>56</sup> University of Colorado Boulder, "Voice and Opera," <https://www.colorado.edu/music/academics/departments/voice-and-opera>. (Accessed January 11, 2021).

<sup>57</sup> University of North Texas, "Jury Repertoire Requirements," <https://voice.music.unt.edu/jury-repertoire-requirements>. (Accessed January 11, 2021).



Cross-training a voice student has the ability for further understanding of one's own instrument. Too often, teachers and singers narrow the scope of their vocal study and forgo an exploration of vocal styles and literature that will benefit versatile training. Robert Edwin states, "The vocal sounds human beings make are more the result of gender and cultural bias rather than physiological function. The human larynx is, for all intents and purposes, a gender-neutral instrument."<sup>58</sup> Edwin's statement carries validity. The traditional musical theatre belt associated with carrying the chest voice high into the treble range has similar qualities to how tenors access a traditional musical theatre belt. The difference between a tenor and treble singer would be the location of registration events. In the *Journal of Singing*, Edwin discusses his work with a DMA candidate from Temple University and her interest in exploring her belt and mix voice for musical theatre. While the student's primary voice professor at Temple University gave the DMA candidate permission to study with Robert Edwin, the *bel canto* professor threatened to terminate her if any damage from cross-training hindered her classical voice. It is important to note that damage to one's instrument through training is never acceptable; training with knowledgeable and trusted educators must always be the priority. But if the student is being threatened with expulsion, the student is not being given the opportunity to explore the entire scope of the voice. Edwin says, "The issue is not what students gain by exploring the whole voice and personality; it's what students lose when they don't: complete vocal development and flexibility and an understanding of their full vocal

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<sup>58</sup> Robert Edwin, "Training 'Mr. Soprano' and 'Ms. Tenor' - Gender-Neutral Voice Pedagogy," National Association of Teachers of Singing, 2014, accessed January 20, 2021, [https://www.nats.org/Breakout\\_Session\\_-\\_Training\\_Mr\\_Soprano\\_and\\_Ms\\_Tenor\\_.html](https://www.nats.org/Breakout_Session_-_Training_Mr_Soprano_and_Ms_Tenor_.html)

capabilities both physically and artistically.”<sup>59</sup> If an instructor doesn’t feel capable of training a musical theatre student, the instructor has the opportunity to seek out their own education in the desired genre or network with trusted voice teachers specializing in the desired style. It is imperative to incorporate versatile training for students, not simply for matching academic knowledge with the current entertainment job market, but most importantly, providing a comprehensive education for students to succeed as artists in the vocal arts.

The perception of what is pleasing to one’s ears may vary greatly between genres of music. Within musical theatre, numerous subgenres utilize various vocal styles with some that are closely related to classical singing and some venturing further away. Finding common ground in versatile teaching requires an understanding of terminology found in both classical and contemporary pedagogy. Wendy D. LeBorgne and Marci Daniels Rosenberg discuss in their book, *The Vocal Athlete*, “Terminology describing vocal registers has resulted in a semantic quagmire of jargon with limited, inconsistent perceptual correlation and emerging evidence-based results.”<sup>60</sup> As a teacher, we ask the questions:

- What do you hear?
- How do you train towards an aesthetically viable and healthy production within a given genre?
- Does this singer possess the innate and/or trainable ability to produce a vocal sound that will be perceived by an audience consistently and artistically appropriate?

Voice teachers spend years training their ear to a vocal sound that is preferred in the current job market and providing training that will have longevity throughout a professional career.

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<sup>59</sup> Robert Edwin, "Culture vs. Science in Voice Pedagogy," *Journal of Singing* 77, no. 1 (2020), 84.

<sup>60</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 186.

Students with interest outside of classical repertoire must find a teacher who is willing to appreciate the genre of music and help guide the student through versatile training.<sup>61</sup>

In order to prepare a student for versatility, teachers must understand the similarities and differences between *bel canto* and musical theatre training. Julie Balog, author of *A Guide to Evaluating Music Theater Singing for the Classical Teacher*, argues body alignment and breathing are the same techniques used in both *bel canto* and musical theatre singing.<sup>62</sup> Karen Hall, in *So You Want to Sing Music Theater*, also emphasizes that breathing is one of the constants in the production of sound. Hall states, “Regardless of genre—whether classical or musical theater—the technique remains the same.”<sup>63</sup> Much of the technical literature in both *bel canto* and nontraditional texts discuss the relaxation of the tongue, importance of pure vowel sounds and modifications, and the necessity to build strength in Mode 2 registration.

Training a voice student in the *bel canto* tradition provides them with a solid foundation in managing breath, creating a freedom of tone production, and unifying the voice. Mathilde Marchesi’s philosophy on teaching gives the most appropriate rationale to vocal training:

Every art consists of a technical-mechanical part and an aesthetical part. A singer who cannot overcome the difficulties of the first part can never attain perfection in the second, not even a genius.<sup>64</sup>

From the research in this project, schools of music must have educators using evidence-based pedagogy to train singers regardless of genre. Students are trusting teachers to provide a

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<sup>61</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 185–188.

<sup>62</sup> Julie E. Balog, “A Guide to Evaluating Music Theater Singing for the Classical Teacher,” *Journal of Singing* 61 no. 4 (2005), 404.

<sup>63</sup> Hall, *So You Want to Sing Music Theater*, 68.

<sup>64</sup> Marchesi, *Bel Canto: A Theoretical & Practical Vocal Method*, xvii.

technical-mechanical instruction resulting in a healthy vocal instrument. In addition, these students will rely on educators to possess applicable teaching tools for the current vocal music movement. Vocal music does not reside in a vacuum. The way a *bel canto* singer sings German *Lieder* is quite different from the way they may sing early Italian opera arias. If we look to professional voice educators to understand these stylistic differences, teachers must also have knowledge in stylistic training outside of the standard *bel canto* repertoire. Robert Edwin states,

Do cultural and tribal beliefs still inform our voice pedagogy more than science and therefore inhibit singers from exploring the full potential of both the human voice and human artistic expression?<sup>65</sup>

It is imperative that voice educators shine light on the importance of providing healthy science-driven technique to singers while stepping forward into versatile training. This type of holistic training will support a student's artistic authenticity.

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<sup>65</sup> Robert Edwin, "Culture vs. Science in Voice Pedagogy," 81.

## CHAPTER 4

### MUSICAL THEATRE TIMBRAL ACOUSTICS

“Nonclassical” music has been the standard descriptor for any music outside the classical western tradition of *bel canto* singing. This vague descriptor envelopes a wide array of national and international music each with its own pedagogical characteristics. Thus, it is important to classify music by what it is and not what it is not. Condensing a large portion of the world’s vocal arts music may narrowly define *bel canto* singing, but it leaves voice teachers at a disadvantage by divorcing a style with similarities in vocal production which occupies a large portion of American vocal literature.<sup>66</sup> Musical theatre contains numerous subgenres related to both European and American music. Since its creation in the late nineteenth and early twentieth centuries, the genre includes styles such as classical, pop, jazz, rock, and country, as well as a unique contemporary musical theatre sound. Wendy LeBorgne and Marci Rosenberg believe “bridging the gap between classical and commercial voice quality terminology and gaining an understanding of current market demands in terms of expectations and viability” is the focus of understanding this type of singing.<sup>67</sup> While similarities in terminology provide ease in teaching a hybrid singer, teachers must be open to contemporary vocal techniques that match the landscape of present-day vocal music writing. In *The Vocal Athlete*, LeBorgne and Rosenberg state,

Voices have changed to meet the demands of the industry, composers are writing increasingly vocally acrobatic scores, and the ability for a vocal athlete to recognize and accurately perform in a variety of styles and qualities require acute aural skills, vocal flexibility throughout the singer’s frequency range, dynamic power, and unique

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<sup>66</sup> Edwin, Edwards, and Hoch, "CCM Versus Music Theater: A Comparison," 184.

<sup>67</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 190.

resonance strategies to create placement and timbre changes quickly and easily depending on style and genre required.<sup>68</sup>

Musical theatre singing holds the understanding of sung words as a stylistic necessity. The resonance space of the singer must coincide more with speech than the darker, more open resonance space of *bel canto* singing. This speech-like spatial awareness should be applied in the lower- and mid-sections of the voice. As the singer approaches the head register, the technique between musical theatre and *bel canto* become similar in their application.<sup>69</sup> Like how *bel canto* pedagogy texts explain, the fundamental beginning of study for hybrid singers is finding and exploring the center or “compass” of one’s voice. Most often, singers can find this area by using normal speech patterns. It is through the assistance of a voice teacher’s trained ears that the student is able to use their natural speaking voice in singing without any unnecessary laryngeal and pharyngeal adjustments.<sup>70</sup> Along with text-based/articulatory clarity, musical theatre singers use a brighter timbre in comparison to classical counterparts with *vibrato* occasionally considered a stylistic choice (and straight tone singing is acceptable).<sup>71</sup>

Kenneth W. Bozeman (1951–), author of *Practical Acoustics: Pedagogical Applications for Teachers and Singers* (2014), explains acoustical adjustments for musical theatre singing include an elevated soft palate, the narrowing of the aryepiglottic sphincter, and slight change in mouth positioning to affirm more natural speech-like production. When the aryepiglottic sphincter is narrowed, the sound production becomes more efficient leaving out the vocal

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<sup>68</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 193.

<sup>69</sup> Hall, *So You Want to Sing Music Theater*, 73.

<sup>70</sup> Spivey and Barton, *Cross-Training in the Voice Studio*, 34–37.

<sup>71</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 192.

depth in *bel canto* singing, but increasing the sound volume with less pressure. *Chiaroscuro*, a term originating in the visual arts and applied to voice pedagogy, refers to the balance of lightness (*chiaro*) and darkness (*scuro*). Historical voice treatises use *chiaroscuro* to describe the alterations of acoustical space creating a balanced timbral quality of the singing voice.<sup>72</sup> While the larynx does not always need to be raised for belt singing, the *chiaroscuro*, so often employed in *bel canto* singing, could be termed more along the lines of *chiarochiaro*. This leaves one to think that much of the style of musical theatre is achieved through acoustical awareness and less by laryngeal function.<sup>73</sup> We can see this also supported by Karen Hall in her book *So You Want to Sing Music Theater*. She agrees voice science is essential in understanding voice production differences between *bel canto* and musical theatre singing. In musical theatre singing, the treble voice will change the pharyngeal space to alter the brightness and forwardness of the sound. The absence of *bel canto* resonance space provides a more natural speech-like sound. The singer is able to accommodate this spatial change because the *tessitura*<sup>74</sup> of musical theatre songs is generally lower than that of classical literature.<sup>75</sup>

Hall's mention of *tessitura* is important to take into consideration as voice teachers select repertoire and train roles in hybrid singers. Voice types have similar labels to traditional classifications (soprano, alto, tenor, bass), but are not always equivalent to the requirements in musical theatre. While we can label singers by classical vocal registers, we must look at the

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<sup>72</sup> Richard Miller, *Solutions for Singers: Tools for Performers and Teachers* (New York, NY: Oxford University Press, 2004), 64–65.

<sup>73</sup> Kenneth W. Bozeman, *Practical Acoustics: Pedagogical Applications for Teachers and Singers* (Hillsdale, NY: Pendragon Press, 2013), Chapter 11.

<sup>74</sup> As defined in *Britannica*, *tessitura* is the general range of pitches found in a melody or vocal part.

<sup>75</sup> Hall, *So You Want to Sing Music Theater*, 67.

stylistic requirements in the music to be successful in cross-training. Musical Theatre Timbral Acoustics, a new term used in this research, will introduce specific timbres associated with registration, resonance, and literature of the musical theatre genre.

Musical theatre timbral acoustics provide voice teachers supplemental terminology to traditional training appropriate for past and current musical theatre literature. Norman Spivey and Mary Saunders Barton, authors of *Cross-Training in the Voice Studio: A Balancing Act*, discuss the necessity to define registration through the interaction between phonation and resonance. It is important to understand vocal registers are not an independent action, but they are symbiotic with pharyngeal events.<sup>76</sup> William Vennard (1909–1971), author of *The Mechanism and the Technic* (1967), discusses the vocal mechanism and the ranges of the chest and head registers. The overlap between the chest and the head register can have the range up to an octave. With the voice having the capabilities of two possible choices in production (head or chest), the concept of a third register proposed by Lamperti, Marchesi, and Vennard deal with the interactions between airflow and acoustical space. Vennard argues most voice instructors should follow the concept of having three registers for treble voices: chest, middle, and head. The middle register will allow vocal development in both the chest and head. The overlap between these two registers, the middle register, will allow the singer to navigate in the weight of production with similarities of chest and head depending upon the proper use of vowels and modification. Vennard calls this production of sound, *voix mixte*.<sup>77</sup> Confusion can emanate when mixed voice is regarded as an isolated laryngeal event.

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<sup>76</sup> Spivey and Barton, *Cross-Training in the Voice Studio*, 34.

<sup>77</sup> William Vennard, *Singing: The Mechanism and the Technic* (New York, NY: C. Fischer, 1968), 63–73.



Kenneth Bozeman proposes the belt does not always come from the chest register or Mode 1. Belting possesses a speech-like quality obtained through a divergent vocal tract.<sup>78</sup> He states, ‘vibrational mode one is extended higher—than in classical female singing at least—but may be achieved with a somewhat thinner vocal fold shape (still thicker than mode two, but somewhat less thick—referred to by some as “mix” when sufficiently high), that retains most of the timbre of “chest” but with less heft, sheer breath force, and airflow.’<sup>79</sup> M1 and M2 are defined by Ingo Titze’s definition of sole laryngeal events of the vocal folds. Mixing, therefore, is not an isolated laryngeal event, but the coordination between laryngeal function and acoustical form.

Kenneth Bozeman’s definition of the term “mix” is “1) an area of cooperation between the shortening, thickening thyroarytenoids and the stretching, thinning cricothyroids; that nonetheless 2) stays essentially in mode one (and retains its basic timbre); but 3) with moderated thickness; and 4) an acoustic strategy that enables sustainably lower pressure levels.”<sup>80</sup> In Chapter 6 of *Practical Acoustics* Bozeman discusses the ability for *bel canto* singers to find a graduated use of the vocal fold thickness. While singers function in M1 and M2, they are able to vary the vocal fold shape in each of the modes. This helps in the transition between modes, and creates a varied use of the folds.

It is the hope of this project that a symbiotic relationship between *bel canto* training and musical theatre can be created through a synthesis of terms that will be beneficial in the

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<sup>78</sup> A divergent vocal tract is where the pharyngeal space is more open in the front versus the back of the mouth.

<sup>79</sup> Bozeman, *Practical Acoustics*, Chapter 11.

<sup>80</sup> Ibid.

training of hybrid singers. The following definitions of Musical Theatre Timbral Acoustics will be applied to forthcoming musical theatre literature. Each section covers a particular area of treble registration, some similar to *bel canto* singing, and some diverging from traditional pedagogy. These timbral acoustics will identify, guide, and provide stylistic appropriateness for students in the versatile voice studio.

### Musical Theatre Timbre Acoustics Classifications

#### “Legit” Head Voice

Definition: Traditional musical theater head voice, also labeled as “legit” singing, is the one most closely related to the *bel canto* style singing. With emphasis placed on *legato*, warmer timbres, and *vibrato* singing, “legit” musical theatre pieces have strong similarities to the American art song and operetta.<sup>81</sup>

The “legit” head voice focuses on a heightened pharyngeal space with plentiful use of *vibrato*. Voice teachers must teach M2 (cricothyroid-dominant) production as a fundamental basis in vocal development. If the focus is achieving authentic musical theatre sounds, both the M1 and M2 must have equal support in the overlapping areas.<sup>82</sup> Musicals, such as *Candide* (1956), *The King and I* (1951), and *She Loves Me* (1963), all designate this style of singing to the soprano *ingénue*.<sup>83</sup> Julie Andrews is a prime example of the soprano ingénue during the Golden Age of Broadway. Andrews originated the stage roles of Eliza Doolittle in *My Fair Lady* (1956), Guinevere in *Camelot* (1960), the movie role of Maria in *The Sound of Music* (1965), and the title role of *Mary Poppins* (1964).<sup>84</sup> Barbara Cook, another Broadway soprano, originated the

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<sup>81</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 192.

<sup>82</sup> Spivey and Barton, *Cross-Training in the Voice Studio*, 39–41.

<sup>83</sup> Edwin, Edwards, and Hoch, “CCM Versus Music Theater: A Comparison,” 183-190.

<sup>84</sup> Lister, “The Broadway Soprano.”

role of Marian in *The Music Man* (1961) and premiered Cunegonde in Bernstein's *Candide*.

After aging out of the *ingénue* roles, she continued singing as a cabaret artist and singing with the New York Philharmonic and at Carnegie Hall.<sup>85</sup> Contemporary productions utilizing this vocal technique include Adam Guettel's *The Light in the Piazza* (2005), Andrew Lloyd Webber's *Love Never Dies* (2010), and Scott Frankel and Michael Korie's *Grey Gardens* (2006).<sup>86</sup>

#### Open Chest/Traditional Musical Theatre Belt (TA-Belt)

Definition: Traditional Belt is thyroarytenoid-dominant vocal production used before microphone amplification. The chest voice would be extended up to C<sub>5</sub> in order to carry over large orchestrations.<sup>87</sup>

The open chest is an unmodified sound providing directness to the voice differentiating it from the middle voice. It is important to note the pitch ranges Marchesi provides in *Bel Canto: A Theoretical & Practical Vocal Method* for the treble voice in *bel canto* technique. In regards to the *bel canto* open chest voice, mezzo sopranos and contraltos extend the chest voice to E<sub>4</sub>–F#<sub>4</sub> and sopranos extend from E<sub>4</sub>–F<sub>4</sub>.<sup>88</sup> Traditional Musical Theatre Belt is one of the vocal necessities for specific roles in Golden Age musicals. Spivey and Barton explain this traditional type of belt is created through a Mode 1 (thyroarytenoid-dominant) production extending between G<sub>4</sub> and D<sub>5</sub>. This production is most commonly heard using open vowels, more specifically the vowel sounds /a/ and /ε/. As in classical singing, when diphthongs are

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<sup>85</sup> Christy Turnbow, "Training the next generation of music theater voice teachers: Penn State's first MFA Pedagogy grad takes stock," *Journal of Singing* 71, no. 2 (2014), 217.

<sup>86</sup> Anita Endsley, *The Musical Theater Codex: An Index of Songs by Character Type*, CreateSpace Independent Publishing Platform, 2017.

<sup>87</sup> Hall, *So You Want to Sing Music Theater*, 70.

<sup>88</sup> Marchesi, *Bel Canto: A Theoretical & Practical Vocal Method*, xv.

present in the word, the singer should remain on the pure vowel throughout the duration of the note.<sup>89</sup> This style is different from contemporary belting, which will be discussed later in this paper. The sound of this belting is considered brassy, bright, and traditionally used with a heavier vocal weight.

Analysis of “Golden Age” musical scores and character descriptions give a clear understanding that this type of vocal style was common with female comedic roles, whether leads or supporting roles, and belt was sparingly used within musical pieces. Examples of traditional belt roles include Ado Annie in Rodgers and Hammerstein’s *Oklahoma* (1943), Annie in Irving Berlin’s *Annie Get Your Gun* (1946), Reno Sweeney in Cole Porter’s *Anything Goes* (1934), and Rose in Jule Styne’s *Gypsy* (1959).<sup>90</sup> This type of singing style was made famous by singers like Ethel Merman and Patti LuPone.<sup>91</sup> With singers trying to produce unamplified sound over a full orchestra, this type of singing carries the chest voice higher than *bel canto* singers into a call-out gesture that was used with more comedic and character roles. Christianne Roll, author of *The Female Broadway Belt Voice: The Singer’s Perspective*, states, “traditional belt is produced on open vocals such as /a/ and /æ/ with *vibrato*, high belt sound is narrow, produced with more closed vowels, such as /e/, and very little use of *vibrato*.”<sup>92</sup>

Additional contemporary roles complementing the ones listed above are Jason Holland and

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<sup>89</sup> Spivey and Barton, *Cross-Training in the Voice Studio*, 35.

<sup>90</sup> David P. DeVenney, *The New Broadway Song Companion: An Annotated Guide to Musical Theatre Literature by Voice Type and Song Style* (Lanham, MD: The Scarecrow Press, Inc., 2009), 8, 10, 76, 130.

<sup>91</sup> William A. Everett and Paul R. Laird, eds. *The Cambridge Companion to the Musical*. 3rd ed. (Cambridge, UK: Cambridge University Press, 2017), 140, 310.

<sup>92</sup> Christianne Roll, “The Female Broadway Belt Voice: The Singer’s Perspective.” *Journal of Singing* 76 no. 2 (2019), 155–62.

Allan Knee's *Little Women* (2005), Jeanine Tesori's *Thoroughly Modern Millie* (2002), and Jason Robert Brown's *The Last Five Years* (2001).

### Musical Theatre Mixed Timbres

Mixed voice is the modification of acoustical space within M1 and M2 registrations.

*Music Theatre Voice: Production, Physiology and Pedagogy* states, "It seems that singers in this quality either sing in mechanism M1 or M2 for a given pitch, while also adjusting their vocal tract and laryngeal open quotient so that the overall sound quality imitates that of the alternate mechanism."<sup>93</sup> With the differentiation between traditional belt and mixed timbres, we can classify mixed voice as an acoustical event emphasizing vowel placement and tone color as the primary factors in this style of singing.<sup>94</sup> Karen Hall states,

Creating an appropriate balance between head and chest registers is of prime importance in music theater training. Some repertoires call for a head-dominant mix sound, while others require a chest-dominant mix sound. The use of head and chest mix registers also depends on the size of the voice. Lighter-voiced singers use more head mix quality; larger-voiced singers favor the chest mix quality.<sup>95</sup>

As in *bel canto* training, the size and range of the voice will determine registration. Through this registration, hybrid singers can adapt the pharyngeal space to the necessary singing style.

As laryngeal and pharyngeal dynamics are dependent upon each other, so are the dynamics of the muscular density and acoustical modifications in mixed voice. For applied teachers, instructing students to avoid carrying excess weight of the chest register is standard

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<sup>93</sup> Bourne, Garnier, and Kenny, "Music theater voice: production, physiology and pedagogy," 441.

<sup>94</sup> Larra Browning Henderson, *How to train singers: with illustrated "natural" techniques & taped exercises* (West Nyack, NY: Parker Pub. Co., 1991).

<sup>95</sup> Hall, *So You Want to Sing Music Theater*, 71.

pedagogical practice in both *bel canto* and musical theatre training. As musical literature has evolved, it is also becoming the norm that most musical theatre singing removes even more extraneous vocal weight as the singer ascends in the chest voice. An important difference between *bel canto* and musical theatre singing are the transitional areas of registration.

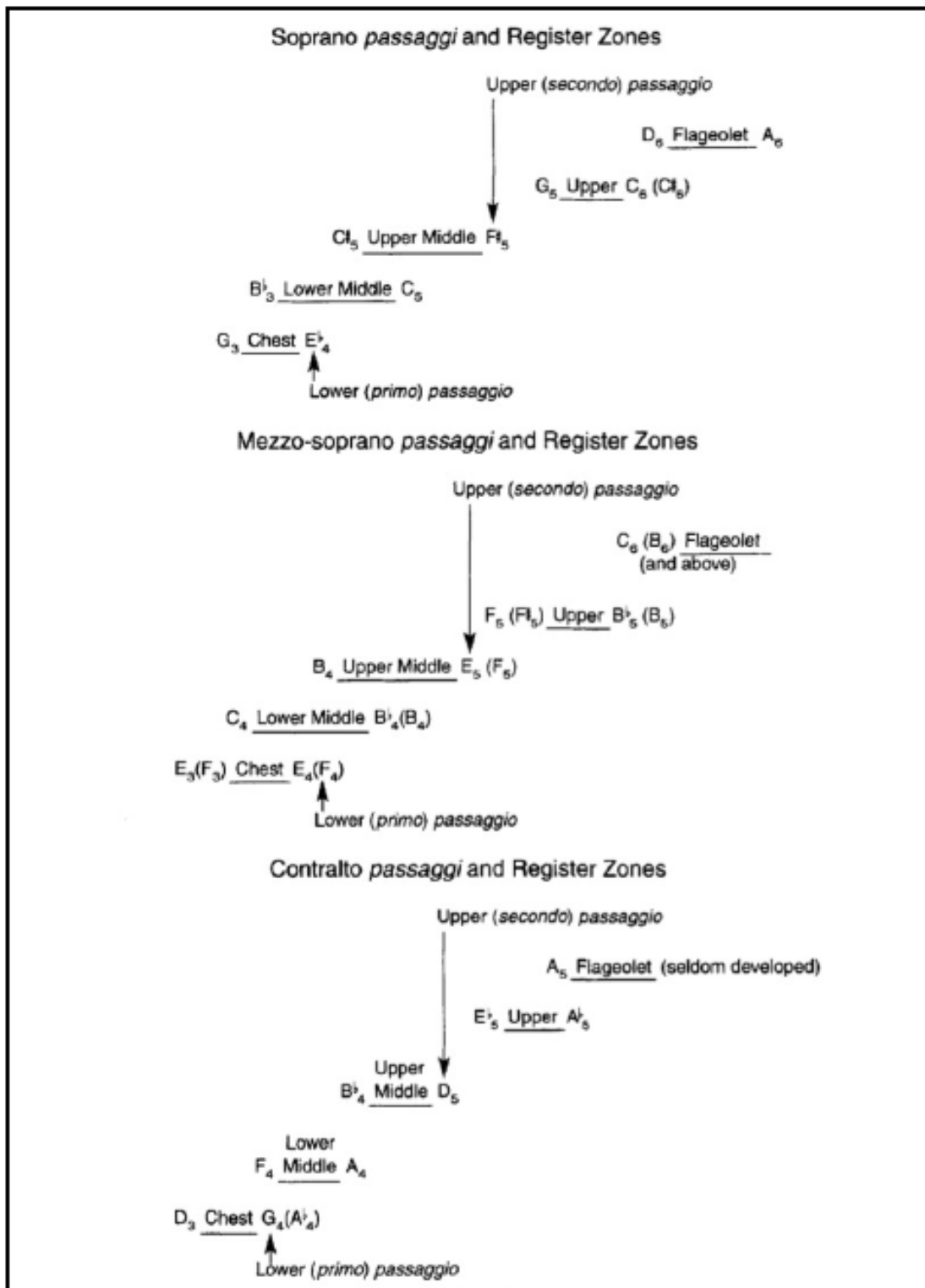
Understanding the difference between musical theatre timbres can only be beneficial to teachers and students if those timbres are applied in the appropriate areas of the treble voice. Richard Miller, author of *Training Soprano Voices* (2000), discusses *bel canto* pivotal points in the singing voice due to laryngeal and acoustical shifts. These points are called *passaggi*. These *passaggi* will slightly vary due to the size and weight of the voice, but Miller's diagram gives a visual representation of adjustments throughout the treble voice.<sup>96</sup> Diagram 1 outlines the soprano, mezzo-soprano, and contralto register zones of a *bel canto* singer:

In Figure 1, Miller uses the terms "lower middle" and "upper middle" as destinations in the center of the soprano voice. Chest ranges from G<sub>3</sub>–Eb<sub>4</sub>, Lower Middle from Bb<sub>3</sub>–C<sub>5</sub>, Upper Middle from C#<sub>5</sub>–F#<sub>5</sub>, and Upper from G<sub>5</sub>–C<sub>6</sub>. Take note of the mezzo-soprano and contralto register zones in comparison to the soprano. The *primary passaggi* for treble voices lie between Eb<sub>4</sub> through G<sub>4</sub>. These *bel canto* registration zones are divided into primarily four areas. While this project has discussed the similarities between the *bel canto* and musical theatre registers of chest and upper (head), musical theatre chest mix (TA-mix) and head mix (CT-mix) are explored as applicable tools in versatile voice training.

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<sup>96</sup> Richard Miller, *Training Soprano Voices* (New York, NY: Oxford University Press, 2000), 23.

Figure 1: Soprano *passaggi* and Register Zones<sup>97</sup>



<sup>97</sup> Richard Miller, *Training Soprano Voices*, 25.

## Musical Theatre Chest Mix (TA-Mix) and Musical Theatre Head Mix (CT-Mix)

Contemporary musical theatre styles acquire some elements of traditional musical theatre singing, but steer more towards text-driven performance with strong influences from pop/rock music. This style is strongly guided by the agility in the voice, bright and clear timbre, and an understanding of weight management in the middle part of the voice. Contemporary mixed voice differs from traditional belting in the lighter weight of the voice and a more consistent use of mixed voice in the extremities of the register supporting the compositions emotional drive. While Traditional Musical Theatre Belt uses open and unmodified vowels, these contemporary mixes embrace vowel modification while balancing laryngeal weight. With this approach, the treble voice is able to extend the chest and head registration with acoustical modifications outside of Richard Miller's *bel canto* Registration Zones. While the timbre of the voice will sound different than its *bel canto* counterpart, commonality is seen between Richard Miller's Soprano *passaggi* and Registration Zones and Mary Saunders Barton's Vocal Arc of Registration and Resonance. Barton's diagram shows the options available in musical theatre voice in comparison to a simplified arc of classical registration.

In Figure 2, the upper arc represents *bel canto* registration with a transitional area residing at G<sub>4</sub>. The middle arc illustrates the head register and its descent into the chest register. The bottom arc shows the ascent of the chest voice. Barton and Miller both agree a transitional area lies within the pitch range of E<sub>4</sub>–G<sub>4</sub>. While this chart is helpful, Barton's chart is not clear in Mode 1 and Mode 2 registration as it relates to resonance. Chest mix (TA-mix) and head mix (CT-mix) do not infinitely extend, but reside in the middle of the voice. The following



diagram presents Musical Theatre Timbral Acoustics incorporating both the *bel canto* and musical theatre singer:

**Figure 2: The Vocal Arc of Registration and Resonance<sup>98</sup>**

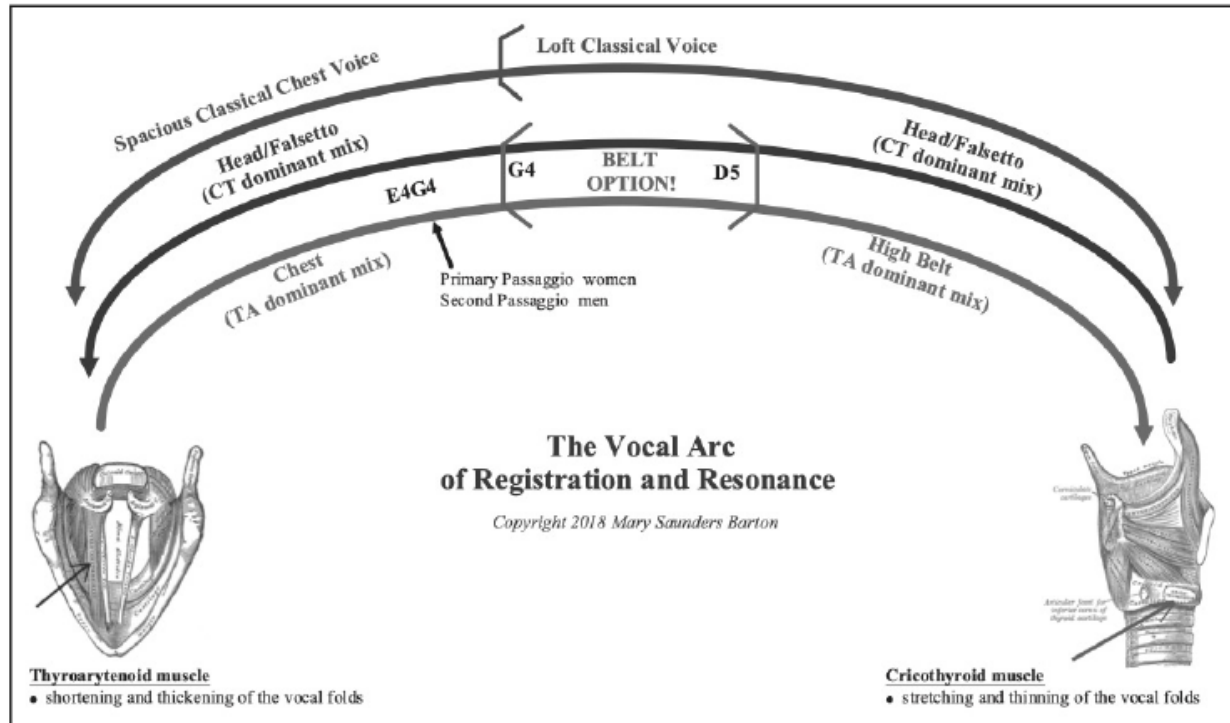


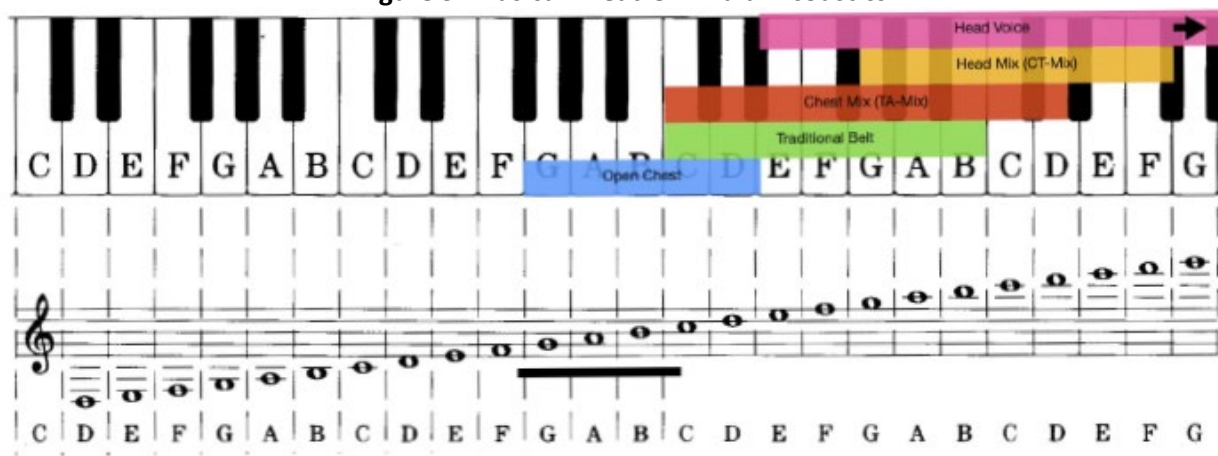
Figure 3 shows a standard musical theatre treble voice. At the polar ends of the voice, singers reside in *bel canto* open chest or head voice. Treble singers will generally transition to “Legit” Head Voice in the pitch range of F<sub>5</sub>–G<sub>5</sub> and will return to an Open Chest register around Eb<sub>4</sub>. Register isolation is not recommended. Richard Miller says, “However, register unification that produces an even scale is physiologically not achievable through register violation. The pedagogic aim should be to unite the registers, not to separate them.”<sup>99</sup> Teachers training hybrid singers should begin teaching singers with an understanding of *bel canto* transition

<sup>98</sup> Spivey and Barton, *Cross-Training in the Voice Studio*, 69.

<sup>99</sup> Richard Miller, *Training Soprano Voices*, 26.

between Mode 1 and Mode 2 registration. After the student displays a solid foundation in registration, timbral changes can be introduced to incorporate traditional belt, chest mix (TA-mix), and head mix (CT-mix). Singers should absolutely avoid training in Traditional Belt without mastery of Mode 1/Mode 2 registration and mixed voice singing. Traditional Belt absent of registration competency will lead to muscular tension, the inability to incorporate mixed voice, and vocal harm.

**Figure 3: Musical Theatre Timbral Acoustics**



The incorporation of *bel canto* chest and head registers along with the musical theatre timbral acoustics of traditional belt, chest mix (CT-mix), and head mix (CT-mix) provide the groundwork for voice teachers to train hybrid singers. Beginning students with a strong foundation in *bel canto* technique provides the opportunity for further exploration of stylistic timbres of the vocal instrument. While all voices will not precisely fit into the diagrams provided, the concept of registration and acoustic shifts throughout a voice is applicable to all students. As hybrid singers begin to experiment with the boundless colors of the voice, they, along with teachers, will find breakthroughs in studio work where one style compliments

another. As Richard Miller urges teachers not to isolate registers, we must also encourage vocal exploration of timbres for the benefit of finding a student's authentic voice.

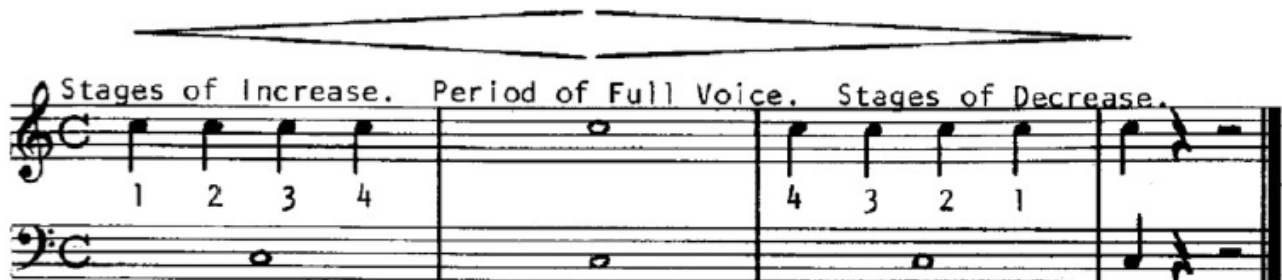
## CHAPTER 5

### VOCAL EXERCISES AND LITERATURE FOR HYBRID SINGERS

#### *Messa di voce*

The *mesa di voce*, found in both Manuel Garcia's *Nouveau traité sommaire de l'art du chant*, and in contemporary texts, such as Spivey and Saunder Barton's *Cross-Training in the Voice Studio: A Balancing Act*, uses this foundational exercise for both *bel canto* and musical theatre singers. Garcia, in this treatise, states, "It is necessary that a voluntary relaxation [détente] of the vocal cords restore the intonation at each instant when it tends to rise." Garcia expresses the great difficulty in singing the tone in both registers simultaneously. Without altering the vowel shape, Garcia recommends the singer "alternating the mechanisms of the throat which produce them."<sup>100</sup> Garcia is isolating the change of registers by making it a solely laryngeal function. Below are two diagrams of vocal exercises; Figure 4 by Manuel Garcia II and Figure 5 by Norman Spivey and Mary Saunders Barton.

Figure 4: Garcia II's *Messa di voce*<sup>101</sup>

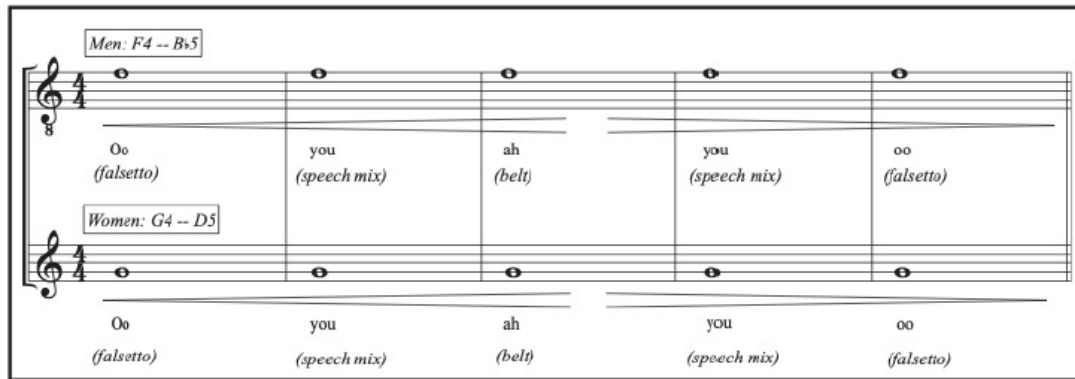


<sup>100</sup> Manuel Garcia II, *Nouveau traité sommaire de l'art du chant* (Paris: M. Richard, 1856).

Collated, edited, and translated by Donald V. Paschke as *A Complete Treatise on the Art of Singing: Part 1* (New York, NY: Da Capo Press, 1984), 134–135.

<sup>101</sup> Garcia, *Nouveau traité sommaire de l'art du chant* (Paris: M. Richard, 1856). Collated, edited, and translated by Donald V. Paschke as *A Complete Treatise on the Art of Singing: Part 1*, 133.

Figure 5: Spivey and Barton's *Messa di voce*<sup>102</sup>



Spivey and Saunders Barton use the *messa di voce* exercise in their cross-training, but incorporate the changing of vowels as the singer adjusts timbral shifts. In the exercise, notice the shift from falsetto to speech-mix to belt. The vowels are also progressing to a brighter sound and then returning to the darker. This exercise is important to relate to Garcia's *messa di voce* because Spivey and Barton are requiring the singer to maintain laryngeal posture while creating acoustical modifications that will be stylistically accurate. The laryngeal and pharyngeal interdependency is challenged in both of these diagrams. Giovanni Battista Lamperti's recommendation of timbre adjustment along with Ingo Titze's writings on acoustical adjustments make these exercises beneficial to the hybrid singer. *Messa di voce* examples in contemporary musical theatre repertoire are shown below in Dave Malloy's *Natasha, Pierre & The Great Comet of 1812* (2016) and Scott Frankel and Michael Korie's *Grey Gardens* (2006).

Example 1, from Dave Malloy's *Natasha, Pierre & The Great Comet of 1812*, places the singer on an /o/ vowel within an area of the voice that could be chest mix (TA-mix) or head mix (CT-mix). This example would be considered a musical theatre mix voice, and not solely a *bel*

<sup>102</sup> Spivey and Barton, *Cross-Training in the Voice Studio*, 50.

*canto* M1 or M2 registration, because of the timbral differences between a *bel canto* sound and musical theatre sound, location of the pitch, and the downward direction of the musical phrase. Because of the dynamic markings, the singer will be required to begin in a head mix (CT-mix) and maintain relaxation in the vocal folds. As the singer crescendos and supports the tone, the singer will transition to a chest mix (TA-mix) through increased air while maintaining the pharyngeal space. Keeping the soft palate elevated, a relaxed mouth shape, and a narrowed aryepiglottic sphincter allows this specific example to be a laryngeal acoustic event.

**Musical Example 1: “No One Else,” *Pierre & The Great Comet of 1812*<sup>103</sup>**

The musical score for "No One Else" from *Pierre & The Great Comet of 1812* is presented in two systems. The key signature is C major (indicated by C#+), and the tempo is primo. The vocal line begins with the lyrics "love you" and "Oh" on a sustained note, followed by "the moon". The piano accompaniment features a "rall." marking and a "mp" dynamic. The score includes various musical notations such as triplets, slurs, and dynamic markings.

Example 2 from Scott Frankel and Michael Korie’s *Grey Gardens* has the singer beginning in a speech-like delivery ascending to a sustained A<sub>4</sub> in the second system. While the singer could use traditional musical theatre belt on the A<sub>4</sub>, the singer must be aware of the dynamic markings and *crescendo* with the sustained B<sub>4</sub>. Keeping the vowel closed on the word “way,”

<sup>103</sup> David Malloy, *Natasha, Pierre & The Great Comet of 1812* (Milwaukee, WI: Hal Leonard, 2016), 54–55.

the singer will use the /e/ vowel to transition from chest mix (CT-mix) to head mix (TA-mix), or could simply stay in chest mix (TA-mix). This is depending on the particular voice itself and where the pitches reside for the singer. It is necessary to remember—all voices are not identical and musical theatre does not adhere strictly to traditional voice classifications. Staying away from the open chest register and open vowels will benefit the singer in accessing the A<sub>4</sub> and B<sub>4</sub> in areas of probable registration shifts and will promote the importance of a more versatile training.

**Musical Example 2: “Around the World,” *Grey Gardens*<sup>104</sup>**

Freely

bird-cage I plan to hang... I'll get to that — some-day... A bird-cage for a bird who flew a -

*mp* *colla voce*

Poco più mosso e agitato

way... A-round the world.

*p* *rinforzando* 14

*rall.* *sub. p*

<sup>104</sup> Scott Frankel and Michael Korie, *Grey Gardens* (Milwaukee, WI: Hal Leonard, 2007), 64.

## Call Out Voice

A musical theatre belt, whether traditional or contemporary, is created with freedom in the voice. Using prolonged call-out exercises, the singer is able to create a speech-like quality and a physical awareness of placement. Muscular “locking” of the sound and increasing the volume is not a healthy approach to traditional or contemporary belting. Through *bel canto* and contemporary pedagogues, the belt lies above the *bel canto* open chest register in the medium register. Remember—contemporary belting is a mixed timbre and must be balanced between the *vocalis* muscle, cricothyroid muscle, and the acoustical space.<sup>105</sup> The student must keep a relaxed pharyngeal space and incorporate closed bright vowels. This will help the singer find a relaxed call with stylistic-appropriateness to the musical theatre genre. These call out exercises are important in chest mix (TA-mix) singing because, with unweighted singing and a conscious modification of pharyngeal space, the singer can present a “disguise” in the extension of the chest register. It is important to note contemporary musical theatre is presented with microphone amplification and composers are mindful of this fact during the writing process. Because of microphone amplification, the voice teacher must remove the concept of projection and focus on a timbral approach within registration. It is beneficial to navigate through the literature making timbral decisions based on the shape and direction of musical phrases and the ability to disguise transitional areas. Below is an example of mixed voice from Lynn Ahrens and Stephen Flaherty’s *Anastasia* where the call out exercise would be beneficial.

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<sup>105</sup> Spivey and Barton, *Cross-Training in the Voice Studio*, 48–49.



Example 3 from the musical, *Anastasia*, allows the singer to use the last two notes as part of a call out vocal exercise. While keeping the /e/ vowel closed on the word “day,” the singer will produce a call out, similar to if you were getting someone’s attention from across the room, without extraneous weight of the chest voice. After successful application of the call out, have the singer introduce the /ε/ vowel at the same pitch as the sigh on “day.” The goal is to make sure the acoustical space is prepared for the highest pitch and the sung vowel remains closed. After slowly introducing sustain in the pitches, the singer can prolong the note to the end of the phrase. If weight creeps into the voice, revert back to the call out exercises until the singer confidently accesses the chest mix (TA-mix) call out exercise.

**Musical Example 3: “In My Dreams,” *Anastasia*<sup>106</sup>**

The musical score for "In My Dreams" from the musical *Anastasia* is shown for measures 144 through 151. The score is written for a vocal line and a piano accompaniment. The key signature is one sharp (F#), and the time signature is 4/4. The vocal line begins in measure 144 with a whole note G4, followed by a half note A4, and then a half note B4. The piano accompaniment consists of a steady eighth-note pattern in the right hand and a bass line in the left hand. Chord symbols are provided above the vocal line: D9sus (measure 144), C/D (measure 145), G (measure 146), D7sus (measure 148), Cmaj7 (measure 149), Eb (measure 150), G/D (measure 151), and G(N.C.) (measure 152). Performance markings include "With motion!" above the vocal line in measure 146, "cresc." and "f" (forte) below the piano line in measure 146, and "rall." (ritardando) below the piano line in measure 148. The vocal line ends in measure 151 with a whole note G4, and the piano accompaniment ends in measure 152 with a final chord of G(N.C.).

<sup>106</sup> Lynn Ahrens and Stephen Flaherty, *Anastasia* (Milwaukee, WI: Hall Leonard, 2016), 22.

### Third, Fifth, and Octave Slides

The balance between chest mix (TA-mix) and head mix (CT-mix) must be encouraged in all hybrid students. LeBorgne and Rosenberg state,

Within this cross-training, singers must learn to navigate a heavier weight to the voice as they ascend in frequency with appropriate resonance strategies (jaw opening, bright vowel tuning) to counterbalance what is happening at the laryngeal level. Conversely, they should also be able to produce the same set of vocal exercises with a lighter vocal weight while maintaining stylistically appropriate timbre.<sup>107</sup>

Some musical theatre styles require singers to produce a vocal belt sound from D<sub>5</sub>-F<sub>5</sub>. This is produced with a Mode 2 dominant function. The singer will create a brighter and forward sound using closed vowels. This production will have similarities to the subglottic production of *bel canto* singing, but with a variation of resonance space. It is the application within a singer's range that these choices are made that identifies the intended timbre.<sup>108</sup> Teachers must take into consideration the addition of amplification with the use of microphones. The use of a microphone allows singers to create a more intimate connection with the audience through the lyrics. With this amplification, the use of the singer's formant and the Traditional Belt are not necessary to carry over large orchestrations.<sup>109</sup>

Using slides of thirds, fifths, and octaves, have the singer begin on an /i/ vowel sound and ascend into an /u/ sound. The brightness of the closed vowel will allow the singer to create a forward resonance with ample pharyngeal space as they connect the head mix (CT-mix) into the head register. In the exercise's descent, the singer will also navigate the bright acoustical

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<sup>107</sup> LeBorgne and Rosenberg, *The Vocal Athlete*, 197.

<sup>108</sup> Roll, "The Female Broadway Belt Voice: The Singer's Perspective."

<sup>109</sup> Edwin, Edwards, and Hoch, "CCM Versus Music Theater: A Comparison," 185.

sound as they arrive at the chest voice. Musical Example 4 provides an example of using head mix (CT-mix ) into head voice.

**Musical Example 4: “The Light in the Piazza,” *The Light in the Piazza*<sup>110</sup>**

Now

see it ev - 'ry-where! It's

ev - 'ry-where! It's ev - 'ry - thing and

Example 4 shows the ascending vocal line moving towards the F#<sub>5</sub> in the second system. As the singer approaches this passage, close the vowels on the phrase “see it” and as the singer

<sup>110</sup> Adam Guettel, *The Light in the Piazza*, (Milwaukee, WI: Hal Leonard, 2005), 94.

reaches the F#<sub>5</sub>, drop the jaw using the head voice on the word “everywhere.” Glottal attacks should be eliminated when singing in this transition; they will fatigue the voice and let needed air escape during times of a higher level of subglottic pressure.<sup>111</sup> It would be beneficial to use the slide exercise with the /i/ grounded at the bottom of the slide and ascending towards /ε/. It would be best for the beginning pitch of the exercise to start in a comfortable area of the middle voice and to ascend chromatically until arriving in the area similar to the literature. Once the exercise is mastered, the student can apply it to the literature.

While these are only a few examples of literature appropriate for the hybrid singer, it is evident composers are creating works that require both *bel canto* and musical theatre technique. The music in this project is not a new phenomena. The aim of this project is to present current literature, but voice teachers have a large body of musical theatre literature appropriate for training the hybrid singer throughout musical theatre history. Sources, such as David P. DeVenney’s *The New Broadway Song Companion: An Annotated Guide to Musical Theatre Literature by Voice Type and Song Style*, Richard Walter’s compiling of musical theatre repertory in the *Musical Theatre Anthology* collection published by voice type, and numerous blogs on the internet provide useful resources on finding literature. Voice teachers are encouraged to explore the immense repertory of musical theatre literature, build a bridge between two genres that are not so distant from each other, and promote a holistic approach to singing.

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<sup>111</sup> Jeannie Gagné, *Belting: A Guide to Healthy, Powerful Singing* (Boston, MA: Berklee Press, 2015), 40.

## FINAL THOUGHTS

Throughout the research and writing of this project, my intention was to always hold both *bel canto* and musical theatre training in high regard and find validation in their study in higher education. My personal journey as a vocalist began with a community offering musical theatre experiences, but education only offering *bel canto* training. During the formative years of my undergraduate degree, I was blessed with a professor who encouraged my passion for singing in both styles, but I felt a divide in how to sing authentically in either style. Performing in one particular style always led to outside commentary on how one style sounded like the other. I vividly remember my junior year jury examination simply writing “singer” on the form, feeling exhausted trying to confine myself to others’ aesthetic of a classical singer. It takes courage and a bit of grit to focus on one’s purpose without getting extinguished by the noise.

As I continued with my three graduate degrees, success came from embracing my authenticity and infusing who I was into my higher education experience. This inspired growth in my capabilities, interweaving the strength of two genres through versatile teaching, and becoming an educator who sees the student holistically. Voice students in my studio will regularly answer these questions:

- Who am I as a singer?
- What do I offer to the world of performing arts?
- How are my studies helping develop who I want to be as a student, singer, and human being?

While vocal studies help singers find the “compass” of their voice, these questions supplement them on the journey to find the “compass” of one’s artistic self.

Students enter higher education with the intent to learn, grow, and find how their skills can be nurtured into a career path for their professional success. It is through universities, colleges, and conservatories where professors and instructors guide students in revealing their potential. But what happens when a student doesn't have the opportunity to explore? What possibilities are suppressed when only one path is offered? Austin Kleon, author of *Steal Like an Artist*, urges,

If I waited to know who I was or what I was about before I started 'being creative,' well, I'd still be sitting around trying to figure myself out instead of making things. In my experience, it's in the act of making things and doing our work that we figure out who we are.<sup>112</sup>

As a voice teacher and educator, it is through this work that I hope other voice teachers can find the importance in training hybrid singers. Supporting a student's artistic growth regardless of genre and providing a versatile and comprehensive vocal technique allows individuals to discover who they are. Uncovering myths and defending sides was never the intent, but reaching across genres to find possibilities for students seems like a meaningful adventure. Some students' paths may be well defined, but it is the students who challenge educators to think beyond what is standard and inspire authenticity that will bring a renewed breath into the art of singing.

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<sup>112</sup> Austin Kleon, *Steal Like an Artist: 10 Things Nobody Told You About Being Creative* (New York, NY: Workman Publishing, 2012), 5.

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